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Sequence Listing was accepted.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: markspencer

Timestamp: [year=2010; month=4; day=5; hr=9; min=36; sec=11; ms=380;]

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Application No: 10568691 Version No: 1.0

Input Set:

Output Set:

Started: 2010-03-26 12:10:52.154
Finished: 2010-03-26 12:10:56.031
Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 877 ms
Total Warnings: 0
Total Errors: 13
No. of SeqIDs Defined: 16
Actual SeqID Count: 16

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SEQUENCE LISTING

<110> Chroma Therapeutics Limited

Bawden, Lindsay J

Bone, Elizabeth A

Drummond, Alan H

Needham, Lindsey A

<120> Detection of Histone Modification in Cell-free Nucleosomes

<130> NRSCP6244818

<140> 10568691

<141> 2010-03-26

<150> PCT/GB2004/003564

<151> 2004-08-18

<150> GB 0319376.0

<151> 2003-08-18

<160> 16

<170> PatentIn version 3.1

<210> 1

<211> 8

<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone
specific antibodies: H3 lys 4 (Me)

<220>

<221> MOD_RES

<222> (4)..(4)

<223> METHYLATION

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Ala Arg Thr Lys Gln Thr Ala Arg
1 5

<210> 2

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<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone
specific antibodies: H4 arg 3 (Me)

<220>

<221> MOD_RES

<222> (3)..(3)

<223> METHYLATION

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Ser Gly Arg Gly Lys
1 5

<210> 3

<211> 5

<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone specific antibodies: H4 lys 5 (Ac)

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<221> MOD_RES

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<223> ACETYLATION

<400> 3

Ser Gly Arg Gly Lys
1 5

<210> 4

<211> 5

<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone specific antibodies: H4 arg 3 (Me)/lys 5 (Ac)

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<223> METHYLATION

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<223> ACETYLATION

<400> 4

Ser Gly Arg Gly Lys
1 5

<210> 5

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<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone
specific antibodies: H4 Ser 2(phos)/Arg 3(me)/Lys 5(Ac)

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<223> PHOSPHORYLATION

<220>

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<223> METHYLATION

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<223> ACETYLATION

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Ser Gly Arg Gly Lys
1 5

<210> 6

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<223> Example of peptide which may be used to generate modified histone
specific antibodies: H3 lys 9 (Me)

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Gln Thr Ala Arg Lys Ser Thr Gly Val
1 5

<210> 7

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<212> PRT

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<223> Example of peptide which may be used to generate modified histone
specific antibodies: H2B ser 14 (Phos)

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<223> PHOSPHORYLATION

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Ser Ala Pro Ala Pro Lys Lys Gly Ser Lys Lys
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<210> 8

<211> 10

<212> PRT

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<223> Example of peptide which may be used to generate modified histone
specific antibodies: H3 lys 27 (Me)

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<223> METHYLATION

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Ala Ala Arg Lys Ser Ala Pro Val Cys Gly
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<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone
specific antibodies: H3 lys 36 (Me)

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<223> METHYLATION

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Ser Gly Gly Val Lys Lys Pro His Lys Cys Gly
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<210> 10

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<212> PRT

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<223> Example of peptide which may be used to generate modified histone
specific antibodies: H4 lys 20 (Me)

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<223> METHYLATION

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1 5 10

<210> 11

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<213> Homo sapiens

<400> 11

Ala Arg Thr Lys Gln Thr Ala Arg Lys Ser Thr Gly Gly Lys Ala Pro
1 5 10 15

Arg Lys Gln Leu Ala Thr Lys Ala Ala Arg Lys Ser Ala Pro Ala Thr
20 25 30

Gly Gly Val Lys Lys Pro His Arg Tyr Arg Pro Gly Thr Val Ala Leu
35 40 45

Arg Glu Ile Arg Arg Tyr Gln Lys Ser Thr Glu Leu Leu Ile Arg Lys
50 55 60

Leu Pro Phe Gln Arg Leu Val Arg Glu Ile Ala Gln Asp Phe Lys Thr
65 70 75 80

Asp Leu Arg Phe Gln Ser Ser Ala Val Met Ala Leu Gln Glu Ala Ser
85 90 95

Glu Ala Tyr Leu Val Gly Leu Phe Glu Asp Thr Asn Leu Cys Ala Ile
100 105 110

His Ala Lys Arg Val Thr Ile Met Pro Lys Asp Ile Gln Leu Ala Arg
115 120 125

Arg Ile Arg Gly Glu Arg Ala
130 135

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<212> PRT

<213> Homo sapiens

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Ser Gly Arg Gly Lys Gly Gly Lys Gly Leu Gly Lys Gly Ala Lys
1 5 10 15

Arg His Arg Lys Val Leu Arg Asp Asp Ile Gln Gly Ile Thr Lys Pro
20 25 30

Ala Ile Arg Arg Leu Ala Arg Arg Gly Gly Val Lys Arg Ile Ser Gly
35 40 45

Leu Ile Tyr Glu Glu Thr Arg Gly Val Leu Lys Val Phe Leu Glu Asn
50 55 60

Val Ile Arg Asp Ala Val Thr Tyr Thr Glu His Ala Lys Arg Lys Thr
65 70 75 80

Val Thr Ala Met Asp Val Val Tyr Ala Leu Lys Arg Gln Gly Arg Thr

85

90

95

Leu Tyr Gly Phe Gly Gly
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<210> 13

<211> 129

<212> PRT

<213> Homo sapiens

<400> 13

Ser Gly Arg Gly Lys Gln Gly Gly Lys Ala Arg Ala Lys Ala Lys Thr
1 5 10 15

Arg Ser Ser Arg Ala Gly Leu Gln Phe Pro Val Gly Arg Val His Arg
20 25 30

Leu Leu Arg Lys Gly Asn Tyr Ala Glu Arg Val Gly Ala Gly Ala Pro
35 40 45

Val Tyr Leu Ala Ala Val Leu Glu Tyr Leu Thr Ala Glu Ile Leu Glu
50 55 60

Leu Ala Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro
65 70 75 80

Arg His Leu Gln Leu Ala Ile Arg Asn Asp Glu Glu Leu Asn Lys Leu
85 90 95

Leu Gly Lys Val Thr Ile Ala Gln Gly Gly Val Leu Pro Asn Ile Gln
100 105 110

Ala Val Leu Leu Pro Lys Lys Thr Glu Ser His His Lys Ala Lys Gly
115 120 125

Lys

<210> 14

<211> 125

<212> PRT

<213> Homo sapiens

<400> 14

Pro Glu Pro Ser Lys Ser Ala Pro Ala Pro Lys Lys Gly Ser Lys Lys
1 5 10 15

Ala Ile Thr Lys Ala Gln Lys Lys Asp Gly Lys Lys Arg Lys Arg Ser
20 25 30

Arg Lys Glu Ser Tyr Ser Ile Tyr Val Tyr Lys Val Leu Lys Gln Val
35 40 45

His Pro Asp Thr Gly Ile Ser Ser Lys Ala Met Gly Ile Met Asn Ser
50 55 60

Phe Val Asn Asp Ile Phe Glu Arg Ile Ala Gly Glu Ala Ser Arg Leu
65 70 75 80

Ala His Tyr Asn Lys Arg Ser Thr Ile Thr Ser Arg Glu Ile Gln Thr
85 90 95

Ala Val Arg Leu Leu Leu Pro Gly Glu Leu Ala Lys His Ala Val Ser
100 105 110

Glu Gly Thr Lys Ala Val Thr Lys Tyr Thr Ser Ser Lys
115 120 125

<210> 15

<211> 142

<212> PRT

<213> Homo sapiens

<400> 15

Ser Gly Arg Gly Lys Thr Gly Gly Lys Ala Arg Ala Lys Ala Lys Ser
1 5 10 15

Arg Ser Ser Arg Ala Gly Leu Gln Phe Pro Val Gly Arg Val His Arg
20 25 30

Leu Leu Arg Lys Gly His Tyr Ala Glu Arg Val Gly Ala Gly Ala Pro
35 40 45

Val Tyr Leu Ala Ala Val Leu Glu Tyr Leu Thr Ala Glu Ile Leu Glu
50 55 60

Leu Ala Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro
65 70 75 80

Arg His Leu Gln Leu Ala Ile Arg Asn Asp Glu Glu Leu Asn Lys Leu
85 90 95

Leu Gly Gly Val Thr Ile Ala Gln Gly Gly Val Leu Pro Asn Ile Gln
100 105 110

Ala Val Leu Leu Pro Lys Lys Thr Ser Ala Thr Val Gly Pro Lys Ala
115 120 125

Pro Ser Gly Gly Lys Lys Ala Thr Gln Ala Ser Gln Glu Tyr
130 135 140

<210> 16

<211> 135

<212> PRT

<213> Homo sapiens

<400> 16

Ala Arg Thr Lys Gln Thr Ala Arg Lys Ser Thr Gly Gly Lys Ala Pro
1 5 10 15

Arg Lys Gln Leu Ala Thr Lys Ala Ala Arg Lys Ser Ala Pro Ser Thr
20 25 30

Gly Gly Val Lys Lys Pro His Arg Tyr Arg Pro Gly Thr Val Ala Leu
35 40 45

Arg Glu Ile Arg Arg Tyr Gln Lys Ser Thr Glu Leu Leu Ile Arg Lys
50 55 60

Leu Pro Phe Gln Arg Leu Val Arg Glu Ile Ala Gln Asp Phe Lys Thr
65 70 75 80

Asp Leu Arg Phe Gln Ser Ala Ala Ile Gly Ala Leu Gln Glu Ala Ser
85 90 95

Glu Ala Tyr Leu Val Gly Leu Phe Glu Asp Thr Asn Leu Cys Ala Ile
100 105 110

His Ala Lys Arg Val Thr Ile Met Pro Lys Asp Ile Gln Leu Ala Arg
115 120 125

Arg Ile Arg Gly Glu Arg Ala
130 135

